

6. APALACHEE BAY TO MOBILE BAY

(1) This chapter describes the coasts of Florida and Alabama bordering the Gulf of Mexico from Apalachee Bay to Mobile Bay and the numerous bodies of water emptying into the Gulf including Apalachee Bay, St. George Sound, Apalachicola Bay, St. Joseph Bay, St. Andrew Bay, Pensacola Bay, and their tributaries. Also discussed are the ports of Port St. Joe, Panama City, and Pensacola, and other smaller ports and landings.

(2) The Intracoastal Waterway for this section of the coast is described in chapter 12.

(3) **COLREGS Demarcation Lines.**—The lines established for this part of the coast are described in **80.805, through 80.815**, chapter 2.

(4) **Charts 11400, 11360.**—The coast consists of a chain of generally narrow and wooded sand islands that trends SW for about 40 miles from Apalachee Bay to Cape St. George, thence NW for 95 miles to Choctawhatchee Bay, and thence about 80 miles W and SW to Mobile Bay.

(5) A **danger zone** for a guided missile test operations area extends well offshore between Apalachee Bay and Choctawhatchee Bay. (See **334.720**, chapter 2, for limits and regulations.)

(6) **Caution.**—Mariners engaged in bottom dragging operations are advised that the area between 29°23.5'N. and 29°50.5'N. and from 86°36.5'W. to 86°48.0'W., has previously been used for emergency release of munitions, and unexploded munitions are lying on the bottom.

(7) From Apalachee Bay to St. Andrew Bay, the 10-fathom curve extends as much as 19 miles offshore; shoals with as little as 3 feet over them extend several miles from the E end of St. James Island, from Cape St. George, and from Cape San Blas. From St. Andrew Bay to Pensacola Bay the 10-fathom curve is close inshore and the beach is steep-to. The 10-fathom curve gradually extends farther offshore beyond Pensacola Bay until off Mobile Bay where it is about 11 miles offshore.

(8) There are numerous fish havens along this section of the coast.

(9) The coral formation which characterizes the coast from the Florida Keys to Apalachee Bay begins to give way in the vicinity of Cape St. George and Cape San Blas to the sand formation to the W.

(10) **Weather.**—Along the coast from Apalachee Bay to Mobile Bay, navigational weather hazards include tropical cyclones, thunderstorms, and cold fronts. The tropical cyclone season generally runs from June through November. August and September have been the most likely months for a hurricane. During the past 100 years, some 26 hurricanes have crossed the coast between St. Marks and Mobile; 15 of these crossings occurred in August or September. There were some severe hurricanes in the early 1900's. In September 1975, Eloise generated 110-knot winds, nearly 15 inches of rain, and 12- to 16-foot tides along this coast.

(11) Thunderstorms develop on about 60 to 70 days annually along this coast. Most occur during the afternoon or evening hours from May through September on about 5 to 15 days per month; June, July, and August are the most active months. Over open waters, thunderstorms are observed 3 to 5 percent of the time from June through September; they often occur at night.

(12) During the winter season, some 15 to 20 frontal systems dip into the area and bring adverse weather. As the cold front

passes, a polar air mass follows, often bringing strong N winds and low temperatures. Gale-force winds blow about 1 to 3 percent of the time over open waters from September through February; autumn frequencies result from both tropical and extratropical systems. Waves of 8 feet or more are encountered 5 to 11 percent of the time and are most likely during January and February.

(13) Visibilities in this area are briefly restricted in showers and thunderstorms, while fog, which occurs throughout the year, varies from a summer minimum to a maximum in the colder months. There is a peak in March when warm southeasterlies blow across colder waters. Frequency and density of the fog increases when approaching the coast. Visibilities drop below 2 miles 1 to 2 percent of the time during February, March, and April; fog is reported up to 6 percent of the time in March over open waters. Shore stations observe fog on about 4 to 7 days per month from December through April.

(14) **Chart 11405.—Apalachee Bay**, about 170 miles NW of Tampa Bay, is formed by the bend in the coastline from a NW to a SW direction. Depths range from 6 to 20 feet with numerous shoals and rocks, some bare at low water. The bay is the approach to St. Marks River.

(15) **COLREGS Demarcation Lines.**—The lines established for Apalachee Bay are described in **80.805**, chapter 2.

(16) **Danger zone.**—An Air Force rocket-firing range has been established in the Gulf S of Apalachee Bay. (See **334.640**, chapter 2, for limits and regulations.)

(17) **Econfina River**, entering the E part of Apalachee Bay, is shallow and navigable by boats drawing about 2 feet at half tide or better; although lesser depths may be found during protracted periods of offshore winds. A private light marks the E side of the entrance to the river. The river channel is rocky and should be used only with local knowledge. **Econfina Landing**, on the W bank 2 miles above the mouth, has facilities for small craft. Gasoline, water, ice, a launching ramp, and limited berthage are available. State Route 14 leads to the main coastal highway U.S. Route 98.

(18) **Aucilla River** flows into Apalachee Bay 4.5 miles NW of Econfina River. The approach for a distance of 3 miles is a narrow winding channel that is difficult for strangers. A private light on **Gamble Point** marks the entrance to the river. The river above the mouth is reported to be poorly marked, fast-flowing, and with depths of over 5 feet. It has been further reported that by giving the bends in the river a good berth, and by avoiding the rocks in the channel which are discernible by ripples, boats drawing 4 feet will have little difficulty. Local knowledge is advised.

(19) **St. Marks National Wildlife Refuge** covers much of the coastal area between Aucilla River and Ochlockonee Bay, about 12 miles SW of St. Marks River.

(20) **Chart 11406.—St. Marks River** flows into the head of Apalachee Bay 83 miles NW of Cedar Keys and 54 miles NE of Cape St. George. The river is the approach to the town of **St. Marks** about 5.5 miles above the entrance. A cracking plant, several oil terminals, and a powerplant, which is about 0.5 mile above the town, are the principal facilities on the river. Barges constitute the major traffic on the river.

(21) **Prominent feature.—St. Marks Light** (30°04'18"N., 84°10'48"W.), the most conspicuous object in the approach to St. Marks River, is 82 feet above the water and shown from an 80-foot white conical tower adjoining a one-story dwelling. The light also serves as the rear light to the 356° lighted entrance range.

(22) **Channels.**—A dredged channel leads from deep water in Apalachee Bay to a turning basin at the town of St. Marks, and continues to just above the power plant about 0.5 mile above the town. In October 1996, the controlling depths was 5½ feet (10 feet at midchannel) to the turning basin, thence 12 feet in the turning basin, thence 4 feet (12 feet at midchannel) to the head of the dredged channel. The channel is marked by a lighted range, lights, daybeacons, and lighted and unlighted buoys.

(23) A land cut, about 500 yards long, has been dredged from the E side of Spanish Hole, about 0.3 mile NW of St. Marks Light for the St. Marks National Wildlife Refuge. In May 1982, the channel had a reported controlling depth of about 3 feet. A public launching ramp is available on the land cut.

(24) **Dangers.**—Shoal water extends about 3 miles S of St. Marks Light, and numerous shoals are on both sides of the channel. They are for the most part unmarked. In October 1990, a visible wreck was reported 3.8 miles SSE of the entrance channel.

(25) **Tides and currents.**—The mean range of tide in St. Marks River is 2.4 feet. (See the Tide Tables for predictions.) Prolonged winds from the N will cause tides to be 1 to 2 feet below predicted levels, and prolonged winds from the S will cause tides to be 1 to 2 feet above predicted levels. The tidal current in St. Marks River approach averages about 0.5 knot at strength. In the river the average is from 0.3 to 0.4 knot, although 2-knot currents have been reported.

(26) **Wakulla River** enters St. Marks River 5 miles N of St. Marks Light. A draft of about 7 feet can be taken upriver for about 0.4 mile above the confluence, and about 3 feet to just above U.S. Route 319 highway bridge, about 5 miles above St. Marks. At this point the river is closed to navigation by a 6-foot-high fence across the river that provides protection for a wildlife refuge. The channel is obstructed by grass, and local knowledge is needed to carry the best water.

(27) The **San Marcos De Apalache State Park and Monument** is on the point formed by the confluence of St. Marks and Wakulla Rivers. A private yacht club and a fish camp are on the E side of Wakulla River about 0.5 and 0.8 mile, respectively, above the confluence of the rivers. Berths, gasoline, a launching ramp, and a forklift that can haul out craft to 25 feet for hull and engine repairs and covered wet and dry storage are available.

(28) A **no-wake idle speed** is enforced on St. Marks and Wakulla Rivers in the vicinity of all wharves and small-craft facilities.

(29) **Wharves.**—The river front at St. Marks has several oil terminal wharves and a power company wharf. The wharves are used to unload petroleum products from barges and, in May 1982, had reported depths of 10 to 15 feet alongside. There are several marinas, two of which have boatyards. The larger of two marine railways can handle craft up to 60 feet for hull and engine repairs. Open or covered storage is available as well as open and covered berthage with electricity and launching ramps.

(30) **Supplies.**—Gasoline, diesel fuel, water, ice, and marine supplies are available.

(31) An overhead power cable with a clearance of 65 feet crosses St. Marks River about 0.5 mile below Newport.

(32) **Newport** is a small resort about 3.4 miles above St. Marks. U.S. Route 98 - State Route 30 highway bridge crossing the river at the N part of the town has a 40-foot bascule span with a clearance of 9 feet. (See 117.1 through 117.59 and 117.327, chapter 2, for drawbridge regulations.) A public launching ramp is above the bridge. Fuel and some supplies are available nearby.

(33) **Chart 11405.**—A beach resort is at **Shell Point** (30°03.4'N., 84°17.4'W.), about 5 miles W of St. Marks River. A marina is in a privately dredged basin on the point. Berths, electricity, gasoline, diesel fuel, water, ice, and marine supplies are available. There is a concrete launching ramp. A motel and restaurant are nearby. In September 1989, depths of 5 feet were reported in the privately marked entrance channel and 5 to 10 feet in the basin. The mean range of **tide** is 2.5 feet. **Shell Point Light** (30°02'24"N., 84°17'30"W.), 17 feet above the water and shown from a pile with a green and white diamond-shaped daymark, marks the approach. Private sailboat mooring facilities are in a basin just N of the marina.

(34) **Spring Creek**, 2 miles NW of Shell Point, is entered through a narrow, winding, and privately marked channel that leads between oyster bars to a small marina on the E side of the creek, about 0.5 mile above the entrance. Local knowledge is advised. Berths, gasoline, marine supplies, and some engine repairs are available at the marina.

(35) **Panacea Harbor**, in **Dickerson Bay**, is about 11 miles SW of St. Marks Light. A dredged channel leads from Apalachee Bay to the public wharf at the town of Panacea. In March 2001, the controlling depth was 2.7 feet (5.3 feet at midchannel) to the public wharf. The channel is marked by lights and daybeacons. Panacea is a summer resort and fishing center with a seafood processing plant in the harbor and several more in town. Gasoline and some supplies can be obtained in town.

(36) **Ochlockonee Bay**, on the W side of Apalachee Bay, is a shallow bay 5 miles long and a mile wide. The approach from Apalachee Bay is obstructed by shoals, which probably shift from time to time. The S half of the mouth is closed entirely by oyster bars. The entrance is between **Ochlockonee Point** on the N and **Bald Point** on the S. **Ochlockonee Bay Light OB** (29°56'00"N., 84°18'00"W.), 16 feet above the water and shown from a dolphin with a green square daymark, about 3 miles SE of Ochlockonee Point, marks the approach to the bay. The mean range of **tide** is 2.0 feet.

(37) A narrow channel marked by private markers leads into the bay. In September 1989, it was reported that craft drawing up to 6 feet experienced no trouble going to the facilities about 1.5 miles above the bridge.

(38) U.S. Route 98 highway bridge, about 2.3 miles W of the entrance to the bay, has a clearance of 35 feet. A launching ramp is at the S end of the bridge.

(39) About 1.5 miles W of the bridge on the N bank, there is a marina in a basin. In September 1989, the reported controlling depth was 6 feet in the channel from the bay and in the basin. The channel is marked by private daybeacons. Berths, gasoline, water, ice, marine supplies, and storage are available. There is a concrete launching ramp and a 7½-ton forklift that can haul out craft up to 25 feet for hull and engine repairs, or dry open or covered storage.

(40) With local knowledge, a depth of 4 feet can be carried through **Buckhorn Creek** into **Sopchoppy River** to the fixed highway bridge about 7 miles from the bay. The bridge has a

33-foot channel span and clearance of 6 feet. The creek is little used.

(41) **Ochlockonee River**, emptying into the head of Ochlockonee Bay, leads W to the junction of Crooked River and then turns N and finally E. A depth of 5 feet, with local knowledge, can be found for 29 miles. U.S. Route 319 highway bridge about 6 miles above the mouth has a fixed span with a clearance of 10 feet. The river is little used. About 8 miles above the mouth, piling of a former railroad bridge is a hazard in the river. A launching ramp is available at a State park on the N side of the river, about 4.5 miles above the mouth.

(42) **Crooked River**, a narrow, crooked tidal stream 22 miles long, connects Ochlockonee River with Carrabelle River. Crooked River is completely blocked by trees and growth about 10 miles above the E mouth.

(43) **Ochlockonee Shoal**, lying about 8 miles SE of Ochlockonee Point, has depths of 3 to 17 feet. Although the shoal is separated from St. James Island by lanes of moderate depths, there is no safe passage between the shoal and the island except for small craft. A lighted bell buoy is SE of the shoal. The buoy also marks the approach to St. Marks River and Apalachee Bay.

(44) There are three fish havens in Apalachee Bay. The first is about 2.2 miles 167° from Shell Point Light, the second about 4.6 miles 161° from St. Marks Light, and the third about 4.5 miles 108° from Ochlockonee Bay Light 2. The first two are unmarked; the third is marked by private buoys.

(45) **Charts 11405, 11401.—St. George Sound and Apalachicola Bay** are adjoining bodies of water, 40 miles long and 3 to 6 miles wide, separated from the Gulf by Dog, St. George, Little St. George, and St. Vincent Islands. Both sound and bay are generally shallow with numerous oyster reefs and shoals dangerous to navigation. East Pass, West Pass, and Government Cut are the principal entrances to the sound and the bay from the Gulf, and thence into the towns of Carrabelle and Apalachicola.

(46) **COLREGS Demarcation Lines.**—The lines established for St. George Sound and Apalachicola Bay are described in **80.805**, chapter 2.

(47) **St. James Island** is the 20-mile-long portion of coast from **Lighthouse Point**, on the W side of Apalachee Bay, W to Carrabelle. The island is separated from the mainland by Ochlockonee Bay, and by Ochlockonee, Crooked, and Carrabelle Rivers.

(48) **South Shoal** extends S from the E end of St. James Island for about 6 miles. The sea breaks on portions of the shoal even in good weather. A lighted bell buoy marks the S end of the shoal.

(49) **Duer Channel**, unmarked and subject to frequent changes, lies at the E end of St. George Sound between South Shoal and Dog Island Reef. The channel is used occasionally by light-draft vessels with local knowledge, but is difficult for strangers. A visible wreck is on the E side of the channel in about 29°49.1'N., 84°22.3'W.

(50) **Alligator Harbor**, a shallow body of water at the E end of St. George Sound, is formed by a long, narrow spit of land that extends W from Lighthouse Point to Peninsula Point. The harbor is entered from Duer Channel through a crooked privately dredged channel that leads from W of **Peninsula Point** NW to the vicinity of **Wilson Beach**, around the N end of **Bay Mouth Bar**, and thence SE into the harbor. The channel is marked by a private light and daybeacons, but is subject to continual change

and extensive shoaling. Local knowledge is advised. In 1982, a reported depth of 4½ feet was available in the channel. In May 1984, it was reported that the former entrance to the harbor, just N of Peninsula Point, had shoaled to bare and should be avoided. Good anchorage can be found in depths of 5 to 7 feet, hard sand bottom, N of Peninsula Point.

(51) A marina is in a small basin about 0.6 mile E of the point. Gasoline, diesel fuel, electricity, water, ice, marine supplies, storage facilities, and a 40-ton mobile hoist that can handle craft up to 65 feet are available at the marina; hull and engine repairs can be made. The marina monitors VHF-FM channel 16 during working hours.

(52) Prominent at Alligator Harbor are the large green boat storage building and skeleton tower at the marina, and the water tank at Southwest Cape, about 1.7 miles W of Lighthouse Point.

(53) **Dog Island Reef**, lying 5 to 6 miles offshore S of St. James Island, extends from a point about 5 miles WSW of Lighthouse Point to the E end of Dog Island. There are depths of 2 to 6 feet over a considerable part of the reef. Local fishermen sometimes enter St. George Sound through the shoal close to the eastern side of Dog Island. The reef is marked near its NE extremity by a light and by a buoy near its W end about 2.7 miles E of the E end of Dog Island.

(54) N of Dog Island Reef and about 4.5 miles W of Peninsula Point a privately dredged and marked channel, with a reported controlling depth of 10 feet in May 1982, leads to a basin on which is the Florida State University's Marine Laboratory. The 180-foot concrete marginal wharf had a reported depth of 8 feet alongside.

(55) **Dog Island**, a narrow, sparsely wooded island over 5 miles long, is the first land sighted in approaching East Pass from the SE. Several houses are on the island, and lodging is available. A privately marked channel, with a reported controlling depth of 6 feet in May 1982, leads to a small cove on the N side of the E end of the island. Water and limited berthage are available at a small marina in the cove.

(56) A visible wreck is N of Dog Island in about 29°49.0'N., 84°37.5'W.

(57) **Chart 11404.—Carrabelle Harbor** is at the entrance to Carrabelle River which flows into St. George Sound. The principal entrance to the harbor and the sound is through **East Pass** between Dog and St. George Islands, about 31 miles SW of St. Marks Light. **Carrabelle** is a small town at the mouth of the river that has several seafood processing plants. The town is on the main coastal highway, U.S. Route 98, and a good road leads to the interior.

(58) **Carrabelle River** flows into St. George Sound 5 miles NNE of East Pass. River currents are rather strong on the ebb. A fixed highway bridge with a clearance of 40 feet crosses the river about 0.5 mile above the turning basin. An overhead power cable with a clearance of 50 feet is about 2 miles above the bridge.

(59) **Prominent features.**—Approaching East Pass from SE on a clear day, the first objects to be seen are the sand dunes on Dog and St. George Island. On closer approach, the trees on the mainland can be seen over the islands and a few pine trees will be noticed near the W end of Dog Island. A water tower and several radio towers are also prominent.

(60) **Channels.**—A dredged channel leads from the Gulf of Mexico for 3 miles through East Pass to a point W of Dog Island, thence for 5 miles through St. George Sound and Carrabelle

River to a turning basin at the town of Carrabelle. From the turning basin, the channel continues for 3 miles to the confluence of New and Crooked Rivers. (See Notice to Mariners and the latest edition of the chart for controlling depths.)

(61) In November 1991 shoaling to an unknown extent was reported between Carrabelle River Buoy 1 and Daybeacon 3. In December 1991, a visible wreck was reported about 1 mile S of Carrabelle Channel Light 13 in about 29°47'35.8"N., 84°39'57.7"W.

(62) The channels are marked by lighted ranges, a light, lighted and unlighted buoys, and daybeacons. A 022°24' lighted range leads through the harbor channel, and a 324° lighted range leads into the river entrance.

(63) In heavy seas, deep-draft vessels should stay in depths of 30 to 40 feet until Carrabelle Channel Lighted Bell Buoy 2 is picked up. In 1969, a submerged object, covered 15 feet, was reported in the vicinity of the bell buoy.

(64) **Anchorage.**—Vessels may anchor in St. George Sound behind the W end of Dog Island in depths of about 20 feet and to the NW of the E end of St. George Island in depths of 18 to 20 feet. At these anchorages, vessels with good ground tackle can safely ride out any gale except a hurricane. Small boats can anchor closer inshore behind the hook at the E end of St. George Island or at various points in the sound where depths are suitable.

(65) **Tides and currents.**—At East Pass and Carrabelle the diurnal tidal range is about 2.6 feet. The tidal currents are strong, sometimes having a velocity of 3 to 4 knots, and ordinarily at least 1 knot. They usually set across the shoals at an angle with the channel, and great care should be taken not to be set toward the shoals on either hand.

(66) **Pilotage.**—Arrangements can be made for local fishing guides to pilot yachts from Carrabelle to Tampa and other coast ports.

(67) **Wharves.**—A town wharf, several fish wharves, and service wharves with reported depths of 7 to 15 feet alongside are along the waterfront. There is a tie-up berth for barges on the S bank of the river opposite the town.

(68) **Small-craft facilities.**—A marina and a boatyard are at Carrabelle. Berths, gasoline, diesel fuel, water, ice, marine supplies, motor and radio repairs, and launching ramps are available at the marina.

(69) **Charts 11404, 11402, 11401.**—**St. George Island and Little St. George Island,** the S boundary of Apalachicola Bay, extend about 24 miles W from East Pass. The islands are densely wooded except the E end of St. George Island, which is a low and barren spit. A marked channel leads to the town of **Eastpoint**, 1 mile NE of Cat Point. In July 1998, the controlling depths were 5 feet in the entrance channel, thence in March 1998, 3 feet in the W arm of the channel paralleling the shore at Eastpoint and 2½ feet in the E arm. Detached breakwaters parallel the E and W arms of the channel. A bridge-causeway extends from Cat Point to St. George Island. The fixed span over the waterway has a clearance of 50 feet. In May 2001, a replacement fixed highway bridge was under construction with a design clearance of 65 feet. Gasoline in cans, groceries, ice, a launching ramp, and some marine supplies are available on St. George Island from a store at the SW end of the causeway. Gasoline, diesel fuel, and limited marine supplies are available at the wharves at Eastpoint. There are seafood packing plants and numerous fish piers at Eastpoint.

(70) **Bulkhead Shoal,** which extends from Cat Point S to Bulkhead Point on St. George Island, marks the dividing line be-

tween St. George Sound and Apalachicola Bay. The Intracoastal Waterway has been dredged through this shoal. An overhead power cable with a clearance of 40 feet crosses along the shoal, but is submerged at the waterway channel.

(71) **West Pass** enters Apalachicola Bay between **Sand Island**, the NW tip of Little St. George Island, and **St. Vincent Island**. The pass is the W approach to Apalachicola Bay and the town of Apalachicola.

(72) **Apalachicola** is on the N shore of Apalachicola Bay at the mouth of the Apalachicola River. The principal industries are fishing and oystering. Waterborne commerce consists of petroleum products, chemicals, fertilizer products, sand, gravel, cement, liquid and dry sulfur, grain, feeds, and logs. The port is the gateway for the extensive river systems of the Chattahoochee and Flint Rivers. The Intracoastal Waterway enters Apalachicola River, passes the town, and then continues W through Jackson River. (See chapter 12.) The town has several historic buildings, a museum, and a hospital.

(73) **Prominent features.**—An abandoned lighthouse (29°35.2'N., 85°02.8'W.), on the SW tip of Little St. George Island, is the most conspicuous object in the West Pass area. From inside the pass on the approach to Apalachicola, the water tank, several microwave and radio towers, and the highway bridges are prominent.

(74) **Dangers.**—A fan-shaped test firing area, marked by unlighted buoys, is centered about 4 miles S of the abandoned lighthouse on Little St. George Island. (See 334.650, chapter 2, for limits and regulations.)

(75) **Channels.**—The main entrance to Apalachicola Bay is through **Government Cut** (also known as **Bob Sikes Pass**), a dredged cut between St. George and Little St. George Islands from the Gulf into the bay about 4.9 miles E of the abandoned lighthouse. The entrance to the cut is protected by twin jetties. In February 2001, the controlling depth was 1.4 feet (1.9 feet at midchannel). The channel is marked by lighted buoys, a lighted range, and daybeacons.

(76) In December 1992, a dangerous wreck that uncovers was reported 1.0 mile SE of the entrance buoys in about 29°35'14.4"N., 84°56'42.6"W.

(77) The channel from the Gulf through West Pass and Apalachicola Bay to Apalachicola is entered through a buoyed bar channel, marked at the entrance by a lighted buoy, about 3.7 miles W of Sand Island. The passage from inside the pass to Apalachicola is via a channel, marked by lights and a daybeacon, that leads SE along the N side of the W end of Little St. George Island to the Lower Anchorage and Horseshoe Cove, thence NE via an unmarked route across Apalachicola Bay to the Intracoastal Waterway, and thence to Apalachicola. The bar channel is subject to frequent shoaling and is marked by buoys which may be relocated to mark the best water without prior notice. Mariners should use caution when transiting West Pass. Once inside the pass, depths of about 9 feet can be carried to Apalachicola.

(78) A swash channel, used considerably by local fishermen, lies between **East Bank** and Sand Island. The channel has a depth of about 3 feet and is passable in all but severe weather. Government Cut and the West Pass channels join the Intracoastal Waterway about 3.5 miles S of Apalachicola.

(79) **Two Mile Channel**, a dredged channel, leads N for 1.2 miles from the bay to a lateral channel leading E and W, parallel to the shore, off the fishing village of **Two Mile**, about 2 miles W of the entrance to Apalachicola River. The channel heading E

connects with the Intracoastal Waterway at Two Mile Channel Light TM. In November 2000, the controlling depth in the entrance channel was 4.7 feet, thence 3.8 feet (4.0 feet at midchannel) in the W channel, and 3.9 feet (5.3 feet at midchannel) in the E channel. An entrance light and daybeacons mark the channels.

(80) **Scipio Creek Channel**, a dredged channel, leads from the river off Apalachicola to a municipal boat basin in **Scipio Creek**. In April 2001, the controlling depth in the channel was 3.4 feet. (9.0 feet at midchannel) with 8.8 to 9.0 feet in the basin.

(81) **Anchorage**.—Vessels may anchor anywhere in **Upper Anchorage** in Apalachicola Bay where depths are suitable. Good anchorage in depths of 12 to 15 feet may be found in **Lower Anchorage**, E of Sand Island. Another good anchorage is about 1 mile S of the turn in the channel leading to Apalachicola.

(82) **Dangers**.—A restricted area of **Tyndall Air Force Base** is close W of Government Cut. (See **334.670**, chapter 2, for limits and regulations.)

(83) **Cape St. George Shoal** extends 11 miles S from **Cape St. George**, the SW tip of Little St. George Island. The shoal consists of several detached spots with moderate depths between them. The shoal is marked by a lighted bell buoy on its S end and by a buoy off its E side. A sunken wreck is 1 mile E of the lighted bell buoy in about 29°23.2'N., 85°01.0'W.

(84) Shoals extend more than 3 miles offshore at West Pass. The approach is marked by a lighted buoy and several other buoys which are shifted to conform to changes in the channel.

(85) **Caution**.—The Apalachicola River entrance lighted range is partly obstructed by the highway bridge. The front range is a flashing light suspended below the bridge deck in the third bent W of the swing span and is difficult to see from the channel entrance. The rear range shows above the bridge deck, but may be difficult to identify in the daytime if vessels with tall masts are docked at the wharves north of the bridge. On the sides of the channel are ruins of wooden jetties extending 2 miles S of the highway bridge.

(86) **Tides and currents**.—The diurnal range of tide at West Pass is about 1.4 feet and at Cat Point 2.2 feet. The currents are influenced by the winds and by freshets, and at times are very strong, especially the ebb; at flood they are generally weak. A velocity of 3 knots has been observed in West Pass channel at a point inside the bar about 0.8 mile NE of Lighted Buoy 2. The ebb current runs out through West Pass and divides, part going to the S over the breakers and part following the deeper water to the bar, the latter being the stronger.

(87) In Apalachicola River, the diurnal range of tide is about 1.7 feet at Apalachicola and the current is principally ebb. With strong winds from the N and E there will be little or no flood current or even slack water, and the height of the water in the bay and river will be reduced a foot or more. The tides meet somewhat to the W of Bulkhead Shoal, the ebb current flowing E through the cut.

(88) **Weather**.—The climate of Apalachicola is typical of that experienced along most of the coast of the N Gulf of Mexico, which tends to moderate temperatures, resulting in a subtropical regime. The annual average temperature at Apalachicola is 68.4°F. The average maximum is 76.2° and the average minimum is 60.1°F. Winter weather often comes from the continent, therefore there are wide temperature variations on occasion. January is the coolest month with an average high of 60.9°F and an average low of 44.3°F. The coolest temperature on record at Apalachicola

is 9°F recorded in January 1985. An average of ten days each year records a minimum below freezing and below freezing temperatures have occurred in each month, November through March. Summer temperatures are more uniform. High temperatures reach 90°F or more on 37 days annually, 40 to 50 days less than more inland locations. July and August are the warmest months, each have average temperatures of 81.6°F. The warmest temperature on record is 99°F recorded in August 1986.

(89) Rainfall results from summer showers and thunderstorms, tropical cyclones, and winter cold fronts. The average annual rainfall for Apalachicola is 57.64 inches, 40% of this falls in the three-month period July, August, and September. July is the wettest month averaging 8.24 inches and April the driest, averages 2.95 inches. Thunderstorms develop on 10 to 17 days per month during June through September and have resulted in brief, heavy rains and strong, gusty winds. Apalachicola has not recorded hurricane-force winds, although 16 tropical systems have passed within 50 miles during the past 50 years. During hurricane Agnes in June 1972, tides in the Apalachicola area measured 5 to 9 feet above mean sea level. Due to the orientation of the coastline, a stronger storm could drive these tides several feet higher. In June 1966, hurricane Alma made landfall about 30 miles east of Apalachicola packing 85-knot winds. This was the earliest in the season that a hurricane had made landfall on the U.S. coast. In September 1985, hurricane Elena remained offshore S of Apalachicola while containing maximum winds of 110 knots. The storm caused severe beach erosion in the region but little else.

(90) Winter weather is usually mild, but interspersed with brief cold spells. Snow has fallen on rare occasions, but usually melts as it falls. Only twice has snow accumulated enough to be measured; the greatest was 0.4 inch recorded in January 1977. Strong winds are most likely in winter, but gales are rare.

(91) The National Weather Service maintains an office at the airport. **Barometers** may be compared there or by telephone.

(92) (See page T-4 for **Apalachicola climatological table**.)

(93) **Pilotage**.—Pilots are not available, but local fishing guides can be hired as pilots for the adjacent waters and the Gulf.

(94) There is a public hospital in Apalachicola.

(95) **Agricultural quarantine** officials are stationed in Pensacola. (See appendix for address.)

(96) The Coast Guard **vessel documentation office** in Pensacola serves Apalachicola. (See appendix for address.)

(97) **Apalachicola River**, formed by the junction of Flint and Chattahoochee Rivers, flows S for about 98 miles into the N part of Apalachicola Bay. The Intracoastal Waterway extends through the lower part of Apalachicola River, branching W through **Jackson River** at its confluence with Apalachicola River about 5 miles above the latter's mouth. (See chapter 12.) A Federal project provides for a 9-foot channel in Apalachicola River from Jackson River to Chattahoochee River. (See Local Notice to Mariners for latest controlling depths.) The channel is marked by daybeacons and unlighted buoys.

(98) The John Gorrie Memorial Bridge, a highway causeway, crosses the mouth of the Apalachicola River from **East Point** to Apalachicola. The bridge has a fixed span with a clearance of 65 feet over the main channel. Overhead power and telephone cables immediately N of the bridge have a clearance of 84 feet.

(99) About 3.7 miles above the mouth, the river is crossed by a railroad swing bridge with a clearance of 11 feet. (See **117.1 through 117.49**, chapter 2, for drawbridge regulations.)

(100) N and S of the John Gorrie Memorial Bridge are numerous private docks with small-craft berths. The municipal pier and basin are about 300 yards S of the bridge. Berths and a launching ramp are available. In May 1982, the pier had a reported depth of about 3 feet alongside the outer face, with 5 feet reported in the basin.

(101) **Small-craft facilities.**—There are several small-craft facilities at Apalachicola. There are fish piers on Two Mile Channel. (See the small-craft facilities tabulation on the small-craft chart for services and supplies available.)

(102) **Communications.**—The town is served by the freight service of the Apalachicola Northern Railroad Company, and the main coastal highway U.S. Route 98 passes through the town.

(103) **Chattahoochee River**, about 365 miles long, rises in NE Georgia and flows generally SW and S to a confluence with Flint River and Apalachicola River at the SW corner of the State. A Federal project provides for a 9-foot channel from the confluence with Flint and Apalachicola Rivers to Columbus, Ga., a distance of 142 miles. (See Local Notice to Mariners for latest controlling depths.)

(104) There are three dams and navigation locks which are 450 feet long, 82 feet wide, and have a minimum depth of 13 feet over the sills. **Jim Woodruff Dam and Lock**, on the Apalachicola River about 93 miles above the mouth, is 0.5 mile below the confluence of the three rivers. **George W. Andrews (Columbia) Dam and Lock** is about 40 miles above the confluence. **Walter F. George Lock and Dam** is about 65 miles above the confluence. Operating hours of the locks are as follows: Woodruff Lock, 24 hours; Andrews Lock, 24 hours; and George Lock, 0800 to 1600. There are general cargo wharf and an oil terminal, and a public ramp at Columbia, Ala., about 43 miles above the confluence, and a marginal masonry general cargo wharf at Columbus, Ga.

(105) **Flint River**, about 287 miles long, rises in central Georgia, flows generally southeastward to **Albany, Ga.**, thence SW to its confluence with Apalachicola and Chattahoochee Rivers, about 25 miles below **Bainbridge, Ga.** There is a public concrete general cargo wharf and an oil terminal at Bainbridge. There is a private wharf with railroad siding at **Chattahoochee, Fla.**, a few miles below Jim Woodruff Dam. The wharf is used mainly for handling of sand and gravel. There are recreation and small-craft facilities on the three rivers.

(106) Navigation charts for the Apalachicola, Chattahoochee, and Flint Rivers System are available from the Mobile Corps of Engineers Office. (See appendix for address.)

(107) **Note:** Mariners are required by the U.S. Army Corps of Engineers to contact Panama City area office by telephone (904-785-5881) for controlling depths and river channel conditions before entering the Apalachicola, Chattahoochee, and Flint Rivers system. Failure to comply with this requirement will result in the Corps of Engineers refusing to permit completion of passage by any tow in violation.

(108) **St. Vincent Sound** is a shallow and unimportant extension of Apalachicola Bay at its NW end. The sound can be entered from E through Apalachicola Bay or from the W through **Indian Pass**, a narrow, shifting, unmarked channel. Strangers should not attempt the pass, which is shallow and used only by local fishing vessels.

(109) **Cape San Blas**, 16.5 miles WNW of Cape St. George, is low and wooded.

(110) **Cape San Blas Shoals**, with depths of 18 feet or less, extend 4 miles S from the cape. Depths of 24 to 30 feet are found 10 miles S and SW of the cape. A lighted bell buoy is moored about 13.5 miles SW of the cape. The waters inshore from the buoy should be avoided by all except light-draft vessels.

(111) With a fresh breeze from any quarter S of E and NW, rough water may be expected at the cape and a breaking sea may run far offshore. Between December and March, fog is frequently encountered off Cape San Blas.

(112) A swash channel marked by buoys crosses the shoals about 2 miles S of the light; depths are about 12 to 14 feet. Although local craft use this channel on a smooth sea, strangers should not. Close inshore is the foundation of a former lighthouse, covered 5 feet.

(113) A **danger zone** of an air-to-air firing practice range is in the Gulf S and W of Apalachicola. (See **334.670**, chapter 2, for limits and regulations.)

(114) **Charts 11393, 11389.**—**St. Joseph Bay**, which extends about 12 miles N of Cape San Blas, is separated from the Gulf by **St. Joseph Peninsula (St. Joseph Spit)**, a long, narrow strip of land and sand hills, wooded in places, that curves NNW from the cape. St. Joseph Bay, recognized as one of the best harbors on the Gulf, is easily entered by vessels with drafts to 25 feet except during periods of very severe weather such as hurricanes. **St. Joseph Bay Entrance Lighted Buoy 2** marks the entrance.

(115) **Port St. Joe** is a town on the E shore of St. Joseph Bay. A large papermill on the waterfront and two chemical plants on Gulf County Canal furnish the main industry for the town. Waterborne commerce consists mainly of paper, marine supplies, petroleum products, and chemical products. Occasional foreign fishing vessels unload their catch at a fish processing plant in the port.

(116) **Time.**—Port St. Joe is in the eastern time zone.

(117) **Prominent features.**—The stack and buildings of the papermill and the chemical plant are the most prominent objects visible from the Gulf. Several water tanks are conspicuous at a closer distance inshore.

(118) **Vessels should approach the harbor within the Port St. Joe Safety Fairway.** (See **166.100 through 166.200**, chapter 2.)

(119) In July 1982, a sunken wreck was reported in the safety fairway in about 29°50.2'N., 85°41.6'W.

(120) A fish haven with an authorized minimum depth of 34 feet is close off the SE side of the entrance to the Port St. Joe Safety Fairway.

(121) **COLREGS Demarcation Lines.**—The lines established for St. Joseph Bay are described in **80.810**, chapter 2.

(122) **Channels.**—From the Gulf, the dredged channel leads across 18-foot shoals to the deeper water inside. Federal project depths are 37 feet to a point about 0.5 mile N of St. Joseph Point, thence 35 feet to Harbor Channel and to a turning basin immediately to the W, thence 35 feet to South Channel, thence 27 feet in South Channel; project depth in the turning basin is 32 feet. (See Notice to Mariners and latest editions of the charts for controlling depths.) A shoal tends to build E from the extremity of St. Joseph Point into the W side of the entrance channel. South Channel is no longer maintained.

(123) The channels, except for South Channel, are marked by lights and buoys; lighted ranges mark the entrance channel and North Channel. Port St. Joe Entrance Channel lighted range on

top of the papermill is often difficult to see because of the steam from the mill.

(124) A swash channel with a depth of 14 feet follows the shore of **St. Joseph Point** at a distance of 0.2 mile and passes between the shore and a shoal that has a depth of about 8 feet. The channel is subject to frequent changes and should be used only with local knowledge.

(125) **Gulf County Canal**, a dredged cut, provides a connection between St. Joseph Bay and the Intracoastal Waterway. The canal has a Federal project depth of 12 feet. (See Local Notice to Mariners and latest edition of charts for controlling depths.) Near the bay entrance the canal is crossed by a fixed bridge with a clearance of 75 feet. Overhead power cables crossing the canal at Highland View and about 1.4 miles above the mouth have a minimum clearance of 85 feet.

(126) **Anchorage.—Vessels should anchor in Port St. Joe Anchorage, N and S of the Safety Fairway leading to the entrance channel.** (See 166.100 through 166.200, chapter 2.) Depths of 24 to 37 feet with hard sand or hard mud bottom are available throughout most of the interior part of the bay. The S third of the bay, a shelf along the sides, and several spoil areas along the entrance channel and along the E side of St. Joseph Peninsula are shoal. Shoaling to 11 feet is close N of South Channel centered in about 29°48'37"N., 85°19'43"W. **Explosives anchorages** are in St. Joseph Bay. (See 110.1 and 110.193a, chapter 2, for limits and regulations.) See latest editions of charts for controlling depths.

(127) In St. Joseph Bay, the diurnal range of **tide** is about 1.4 feet.

(128) **Currents.**—Strong and erratic crosscurrents are reported at the entrance to St. Joseph Bay NE of St. Joseph Point. These currents are reported to be particularly strong during the ebb. Caution is advised when entering the bay.

(129) **Pilotage, Port St. Joe.**—Pilotage is compulsory for all foreign vessels and U.S. vessels under register in foreign trade if drawing more than 7 feet of water. Pilotage is optional for U.S. coastwise vessels that have on board a pilot licensed by the Federal Government. A pilot station is no longer maintained at Port St. Joe. Vessels desiring a pilot should request one through the ships' agent or by contacting the Panama City Pilots. (See Pilotage, Panama City (indexed as such), this chapter. Vessels should be prepared to proceed to the entrance to St. Andrew Bay, if so directed, which is located about 20 miles to the NW, where the pilot will board between St. Andrew Bay Entrance Lighted Whistle Buoy SA and the first set of entrance channel buoys in about 30°06.8'N., 85°44.5'W. Procedures for requesting pilots are further described under Panama City pilotage.

(130) **Towage.**—Tugs are obtained from Panama City when required.

(131) **Quarantine, customs, immigration, and agricultural quarantine.**—(See chapter 3, Vessel Arrival Inspections, and appendix for addresses.)

(132) **Quarantine** is enforced in accordance with regulations of the U.S. Public Health Service. (See Public Health Service, chapter 1.) A hospital is in the city.

(133) **Customs.**—Vessels bound for Port St. Joe notify the customs officer at Panama City of their arrival. Port St. Joe is a **customs port of entry**. The Deputy Collector of Customs at Panama City usually comes to the vessel at the first opportunity. The records for St. Joe are maintained at Panama City.

(134) **Harbor regulations.**—There are no formal printed harbor regulations. The Port St. Joe Port Authority has jurisdiction over the port. The **harbormaster** can be reached by telephone (904-227-1319). A **speed limit** of 4 m.p.h. is posted in the harbor.

(135) **Wharves.**—A large papermill and an adjoining oil dock are 0.5 mile long with depths of from 26 to 32 feet alongside on the waterfront.

(136) **Supplies.**—Bunker C is available on an emergency basis. Diesel fuel, provisions, water, and limited marine supplies are available.

(137) **Repairs.**—There are no facilities for making major repairs or drydocking deep-draft vessels at Port St. Joe; the nearest facilities are at Mobile. Above- and below-the-waterline repairs can be made to small vessels. A marine railway in the basin on the N side of the Gulf County Canal can haul out craft to 85 feet for complete repairs.

(138) **Small-craft facilities.**—A boat basin on the N bank of the Gulf County Canal just NE of the highway bridge provides berths, gasoline, diesel fuel, water, ice, and marine supplies.

(139) **Communications.**—Port St. Joe is served by the Apalachicola Northern Railroad and is on the main coastal highway, U.S. Route 98.

(140) **Bell Shoal** is the broken ground NW of the entrance channel making off from St. Andrew Point, 6.5 miles NW of St. Joseph Point.

(141) **Mexico Beach** is a small resort community about 4.5 miles N of St. Joseph Point. A privately marked channel leads to **Salt Creek**; the entrance is subject to shoaling and should not be attempted without local knowledge. In September 1985, the entrance to the creek was closed to navigation. In 1983, the reported depths inside the creek were 5 feet. U.S. Route 98 highway bridge, on the E branch of the creek about 0.3 mile above the entrance, has a fixed span with a reported clearance of 13 feet. Several small marinas are on the E branch above the bridge. Berths with water and electricity, gasoline, ice, and marine supplies are available; a 10-ton forklift can haul out craft to 26 feet for storage or hull and engine repairs. A no-wake **speed limit** is enforced on Salt Creek.

(142) **Crooked Island** is a narrow island extending 7 miles NW from St. Andrew Point. The island encloses **St. Andrew Sound**, a shallow, unimportant body of water.

(143) A **restricted area** of a drone launch corridor extends through St. Andrew Sound into the Gulf of Mexico. (See 334.770, chapter 2, for limits and regulations.)

(144) **Charts 11390, 11391, 11392.—St. Andrew Bay**, a narrow irregularly shaped harbor, lies 30 miles NW of Cape San Blas. Excellent anchorage and protection during hurricanes can be found in this nearly landlocked harbor and its tributary inlets, West, North, and East Bays. A ship channel, protected by jetties, in a land cut through **Shell Island**, forms a passage from the Gulf to St. Andrew Bay.

(145) **Panama City** is the seat of Bay County. One of the largest papermills in the world is at **Bay Harbor**, E of Panama City proper. Waterborne commerce consists mainly of general cargo, paper and petroleum products, shell, steel and iron products, marine supplies, chemicals, fertilizers, and small amounts of fish.

(146) **Time.**—Panama City is in the central time zone.

(147) **Prominent features.**—On the approach from seaward, the shoreline appearance is radically different on the east side of the ship channel where it appears as a low unbroken line of woods;



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and the west side of the ship channel where it appears as a succession of beach homes and condominiums, some as tall as 30 stories. This construction is of varying density from the ship channel at St. Andrew Bay to the east side of the entrance to Chocktawhatchee Bay at Dentin. It is most dense along the Panama City Beach areas to Phillips Inlet and at Dentin. A large condominium apartment building 2.5 miles NW of the channel entrance is prominent. The condominium is reported to be a good radar target at more than 32 miles. The dredged cut will not show unless the vessel is on or near the line of the cut. The first landmarks to be seen are the smoke and tall stacks of the papermill at Bay Harbor and two 130-foot water tanks at **Tyndall Air Force Base**, about 5 miles SSE of the stacks. An aerolight is atop the E tank. Next seen is the Municipal Auditorium at the Panama City Marina.

(148) **St. Andrew Bay Entrance Lighted Whistle Buoy SA** (30°05'30"N., 85°46'24"W.) about 2.2 miles SW of the entrance to the dredged channel, marks the approach.

(149) **Vessels should approach the harbor through the prescribed Safety Fairways.** (See 166.100 through 166.200, chapter 2.)

(150) **COLREGS Demarcation Lines.**—The lines established for St. Andrew Bay are described in **80.810**, Chapter 2.

(151) **Navigation Guidelines, St. Andrews Bay.**—The increased size and draft of vessels entering the bay has resulted in increased

navigational problems. Based upon reported marine casualties to vessels and after consultation between local marine interests and regulatory agencies, including the Coast Guard Captain of the Port, the following general guidelines have been developed to enhance safe navigation.

(152) It is recommended that all vessels, particularly those which must navigate in the channel because of draft restraints, strictly adhere to them. Nothing in these guidelines shall supersede or alter any applicable laws or regulations. In construing and complying with these guidelines, regard shall be had to all dangers to navigation and collision and to any special circumstances, including the limitations of the vessels involved, which may make a departure from the guidelines necessary to avoid immediate danger.

(153) The dredged cut between the jetties which leads to natural deep water within the Bay is subject to shoaling and the project depth presently authorized is not always available. The local pilots recommend that vessels intending to call Panama City should request advice from their local agents or the pilots as to the maximum draft which can be safely handled at that time.

(154) Due to the constant shoaling which tends to restrict the width of the dredged cut available for large vessels, as well as the strong currents which run through the cut, one way traffic is recommended for all large vessels transiting the entrance channel.

(155) Vessels towed on a hawser which must enter or leave through the dredged cut and, due to draft or size, are required to navigate in the main channel should exercise particular care that they at all times have the tow under control and are able to navigate in their channel half width if necessary and stop if required. To insure this capability it is recommended that they not transit the cut with a strong fair tide and employ assist tugs if necessary.

(156) Large numbers of recreational boats frequent the entrance channel, particularly on week ends and holidays. Additionally sailing regattas sponsored by the local yacht club may, at times, include courses which cross the main shipping channel inside St. Andrews Bay. Local shipping agents are familiar with these activities and normally request assistance from the Coast Guard and other local law enforcement agencies in monitoring this recreational activity to minimize conflicts with commercial shipping. However, large vessels must keep a sharp lookout for such boats and be prepared to warn them by appropriate signals if they should obstruct the channel.

(157) All vessels entering from sea and bound for facilities located in St. Andrews Bay will, for a time, be navigating in the Intracoastal Waterway (ICW) which has considerable tug and barge traffic. To insure they are aware of traffic in their vicinity, all vessels transiting St. Andrew Bay, which are confined to the marked channels or otherwise restricted in their movements, are encouraged to give the following Security Calls on VHF-FM Channels 16 and 13.

(158) Inbound vessels should, as a minimum, give a security call via VHF Channel or Channel 16 at least 15 minutes before passing St. Andrews Bay Entrance Lighted Buoy 1, and another call approaching St. Andrews Bay Entrance Lighted Buoy 15 before encountering traffic in the ICW.

(159) Outbound vessels should give a similar security call at least 15 minutes before getting underway and again approaching Buoy 15.

(160) Tugs and barges as well as other large vessels traversing the ICW should give similar security calls when approaching the Hathaway Bridge eastbound and when passing the DuPont Bridge westbound. An additional call should be made as these vessels approach Buoy 15.

(161) Security Calls should provide the following information as a minimum; name and call sign of vessel, if engaged in towing, present location or ETA at the sea buoy or either of the bridges as appropriate, direction of movement and destination or intentions. The above reporting points are the minimum recommended and additional calls may be prudent under existing circumstances.

(162) Large vessels attempting to dock at the Panama City Port Authority West Berth at Dyers Point with a strong breeze from NE through SE and a strong flood tide have frequently grounded on the small island just to the west of the berth. This is a particular problem during the winter months. Vessels going to this berth under these conditions should employ additional tugs and when, due to limited local tug assistance available, this is not considered to provide an acceptable level of safety, they should delay until slack water or an ebb tide which will tend to hold them off the island.

(163) Ship owners and Masters are advised that oil spill clean-up contractor services, including containment and clean-up equipment, are available in Panama City. Information concerning contracting for these services may be obtained by contacting local shipping agents, the Panama City Port Authority, the U.S. Coast Guard, or the Florida Marine Patrol.

(164) **Channels.**—The Federal project for Panama City Harbor provides for a jettied entrance cut through Shell Island 34 feet deep, thence 32 feet deep in the bay. (See Notice to Mariners and latest editions of charts for controlling depths.) The entrance channel is marked by a **052°10'** lighted range and lighted buoys.

(165) Submerged jetties, marked at the outer ends by lighted buoys, extend channelward from the NW and SE harbor entrance points. Mariners are cautioned to keep within the buoyed channel while navigating the land cut through Shell Island.

(166) The entrance SE of Shell Island is not marked, constantly shifting, and considered unsafe for navigation.

(167) Two fish havens are in the safety fairway about 2.5 and 5.4 miles SW of the entrance.

(168) **Anchorage.**—**Vessels should anchor in the Panama City Anchorage, E of the Safety Fairway.** (See **166.100 through 166.200**, chapter 2.) Vessels awaiting berths, or who desire to anchor for short periods of time, normally anchor in the vicinity of St. Andrew Bay Entrance Lighted Whistle Buoy SA well clear of inbound or outbound traffic. In addition, excellent anchorage can be found almost anywhere in the bay where the depth is suitable. The usual anchorage for large vessels is to the W of **Redfish Point** in depths of 35 to 40 feet. Vessels also anchor for short periods of time SE of the Port Authority berths located at **Dyers Point** in depths of 26 to 32 feet.

(169) **Dangers.**—Danger zones for small arms firing ranges are SE of the entrance to St. Andrew Bay. (See **334.680**, chapter 2, for limits and regulations.)

(170) In December 1992, a submerged obstruction covered 30 feet was reported 0.27 mile SE of St. Andrew Bay Light 18 in about 30°08'27"N., 85°39'47"W.

(171) **Tides.**—The diurnal range of tide at the St. Andrew Bay channel is 1.3 feet. Winds greatly affect the tide. S winds of long duration raise the water level in the bay, and N winds lower it.

(172) **Currents.**—The strong ebb current sets outward through the dredged cut and causes heavy tide rips if the wind is S and of moderate strength. With a S or W breeze, small vessels bound in or out should endeavor to reach the entrance during flood current.

(173) **Weather.**—Panama City has a pleasant subtropical climate that is occasionally interrupted by cold air outbreaks in winter and thunderstorms in summer. There is also a threat of a tropical cyclone from June through November. Thunderstorms, which can occur in any month, are most likely in June, July, and August when they occur on an average of 10 to 14 days per month. Peak wind gusts have been close to 70 knots in August and September. In September 1975, Eloise, generating estimated 110-knot winds, became the first hurricane of the 20th century to hit this area. A 98-foot tower 13 miles off Panama City measured 80-knot winds with 135-knot gusts while high water marks reached 18.2 feet above mean sea level in some areas. Fog is most likely late at night and during early morning hours from November through April, when visibilities drop below 0.5 mile on 5 to 8 days per month.

(174) **Pilotage, Panama City.**—Pilotage is compulsory for foreign vessels and U.S. vessels under register in foreign trade if drawing 7 feet or more of water. Pilotage is optional for U.S. coastwise vessels that have on board a pilot licensed by the Federal Government. Pilotage is available from Panama City Pilots, Inc., P.O. Box 2071, Panama City, FL 32402-2071, telephone 904-769-0058, 904-785-2209, or 904-785-2524. Pilots may be arranged by telephone, through the Mobile Marine Operator, or through ships' agents. The pilots request ETA information 24

hours prior to arrival, if possible. Pilots normally board between St. Andrew Bay Entrance Lighted Whistle Buoy SA and the first set of entrance channel buoys in about 30°06.0'N., 85°46.0'W. The primary pilot boat is a 47-foot vessel and at times an alternate 30-foot vessel will be used. Depending upon circumstances, the vessel's speed should be adjusted and the pilot ladder rigged on the lee side as requested by the pilot at the time of boarding. The boats are equipped with VHF-FM channels 13 and 16 which are monitored 1 hour before a vessel is expected. Channel 14 is used as a working frequency for tugs and port facilities. Pilots carry portable radiotelephones.

(175) **Towage.**—Tugs up to 2,000 hp are available. Requests for tug service are best made through the ships' agent, but may also be contacted over VHF-FM channel 16 or by telephone (904-871-0170).

(176) **Quarantine, customs, immigration, and agricultural quarantine.**—(See chapter 3, Vessel Arrival Inspections, and appendix for addresses.)

(177) **Quarantine** is enforced in accordance with the regulations of the U.S. Public Health Service. (See Public Health Service, chapter 1.)

(178) Panama City is a **customs port of entry**.

(179) **Panama City Coast Guard Station** is on **Alligator Bayou**, opposite Dyers Point. The bayou is within a **restricted area**. (See 334.760, chapter 2, for limits and regulations.)

(180) **Wharves.**—The deep-draft facilities of Panama City are located at Dyers Point, W of Panama City; on the waterfront proper just W of Massalina Bayou; and at Bay Harbor. Only the deep-draft facilities are described. For a complete description of the port facilities refer to Port Series No. 19, published and sold by the U.S. Army Corps of Engineers. (See appendix for address.) The alongside depths are reported; for information on the latest depths contact the private operator. All these facilities have rail and highway connections, and water and electrical shore power connections. Cargo is generally handled by ships' tackle; special handling equipment, if available, is mentioned in the description of the particular facility. Floating cranes to 225 tons are available by special arrangement.

(181) **Facilities at Dyers Point:**

(182) Panama City Port Authority, West Berths 1, 2, and 3 (30°10'39"N., 85°43'58"W.): 1,528 feet of berthing space; 32 feet alongside; deck height, 8½ feet; pipeline extends to storage tanks, total capacity 6.3-million gallons; rail connections; receipt and shipment of general cargo, wood pulp, steel and paper products; receipt of fatty acids and limonene (citrus by-product); owned by City of Panama City and operated by Panama City Port Authority.

(183) Panama City Port Authority, West Berth 4 (30°10'47"N., 85°43'58"W.): 200 feet of berthing space; 17 to 32 feet alongside; deck height, 8½ feet; receiving hopper and belt conveyor; open storage with 5,000-ton capacity; rail connections; receipt of dry bulk aggregate (limestone); owned by City of Panama City and operated by Panama City Port Authority.

(184) Panama City Port Authority, South Dock (30°10'34"N., 85°43'53"W.): 1,100 feet of berthing space; 32 feet alongside; deck height, 8½ feet; gantry crane with 150-foot boom; receipt and shipment of general cargo in foreign and domestic trade; shipment of bulk peanut meal and clay; owned by City of Panama City and operated by Panama City Port Authority.

(185) **Facilities at Bay Harbor:**

(186) Stone Container Corp., Panama City Plant, No. 2 Dock (30°08'14"N., 85°37'38"W.): 924 feet of berthing space; 30 feet alongside; deck height, 10 feet; shipment of paper products and wood pulp; owned and operated by Stone Container Corp.

(187) Stone Container Corp., Panama City Plant, No. 1 Dock (30°08'12"N., 85°37'32"W.): 400 feet of berthing space; 31 to 33 feet alongside; deck height, 9 feet; receipt of fuel oil for plant consumption; occasional receipt of wood chips; owned and operated by Stone Container Corp.

(188) **Supplies.**—Diesel fuel and Bunker C can be supplied by truck to vessels at their berths. Water and marine supplies are available.

(189) **Repairs.**—There are no facilities for making major repairs or drydocking deep-draft vessels at Panama City; the nearest facilities are at Mobile. There are machine shops in the city, and above- and below-the-waterline repairs can be made to small vessels. The largest marine railway can handle vessels up to 150 feet long and 250 tons.

(190) **Small-craft facilities.**—There are large municipal yacht basins at the head of the main ship channel in Panama City and in St. Andrew. Other small-craft facilities are on Watson and Massalina Bayous, Lake Ware, and at the Hathaway Bridge near Dyers Point. (See the small-craft facilities tabulation on chart 11390 for services and supplies available.)

(191) **Communications.**—Panama City is served by The Bay Line Railroad and has bus connections to all points. Panama City International Airport is about 4 miles NW of the center of the city. Maritime radio service is through the Mobile Marine Operator (WLO).

(192) **Watson Bayou** is an irregularly shaped body of water with depths of 7.3 to 16.4 feet. There are several piers for light-draft vessels. Over the E arm, near **Millville**, is a railroad bridge with a 26-foot fixed span and a clearance of 13 feet. A fixed highway bridge is close E of the railroad bridge. Several oil terminals, served by barges, are on the bayou. U.S. Route 98 highway bridge crossing the bayou, about 1.2 miles above the entrance, has a 35-foot fixed span with a clearance of 9 feet. There are two marinas E of the bridge. Welding and machinery repairs are available nearby. The channel is unmarked.

(193) A yacht club in **Bunkers Cove**, between Bunker Point and Town Point, has berths and marine services for members and guests.

(194) In **Massalina Bayou**, N of Bunkers Point, are many landings for small craft. Several marinas can provide berthing, gasoline, some marine supplies, and a marine railway that can haul out vessels to 74 feet for hull and engine repairs. A submerged jetty is on the NW side of the entrance. A light marks the entrance to the bayou. In May 1982, it was reported that a depth of about 8 feet could be carried through the mouth of the bayou, thence depths of 5 to 10 feet were available to the Fourth Street highway bridge about 0.4 mile above the entrance. The bridge has a 28-foot fixed span with a clearance of 6 feet. Beach Drive Highway Bridge (Tarpon Dock bascule bridge) over the entrance has a 40-foot bascule span with a clearance of 7 feet. (See 117.1 through 117.49 and 117.301 chapter 2, for drawbridge regulations.) The bridgetender monitors VHF-FM channel 9, 24 hours every day; telephone (904) 872-3169.

(195) About 400 yards NW of Massalina Bayou is the Municipal Pier and Yacht Basin. In May 1982, depths along the face of the inner fuel area were reported to be about 9 feet. It is protected by small jetties from wind and seas from the SW through the NW.

Another municipally owned long pier and yacht basin at St. Andrew N of **Buena Vista Point** is used as a public landing for sport fishermen.

(196) **Grand Lagoon** extends about 5 miles NW from just within the dredged entrance to St. Andrew Bay. A dredged channel leads into the lagoon from St. Andrew Bay to a point about 0.4 mile E of State Highway 392 Bridge, thence branches to serve facilities of both the N and S shores; these branches are connected by a channel running parallel to the highway bridge. In March 2001, the controlling depth was 3.6 feet (8.0 feet at midchannel). The channel is marked by lights and daybeacons. State Route 392 bridge has a 23-foot fixed span with a clearance of 8 feet. Marinas near the highway bridge provide gasoline, diesel fuel, berths, electricity, water, ice, and marine supplies. A 30-ton mobile hoist can haul out craft for complete repairs and storage.

(197) A privately marked channel, with a reported controlling depth of 5 feet in May 1985, branches N from the dredged entrance channel to a yacht club marina; the marina has berths and other services for members and transients.

(198) **Chart 11390, 11393, 11389.—East Bay** an arm of St. Andrew Bay, extends in a general ESE direction for about 18 miles. The several small towns on East Bay are of little commercial importance.

(199) **West Bay**, the NW arm of St. Andrew Bay, is generally free from dangers except for several oyster bars with depths of 5 to 8 feet over them. A small island, created by the dredging of the new Port Authority Terminal, is off Dyers Point; the island is marked by a light.

(200) **Panama City Beach, Long Beach Resort, Edgewater Gulf Beach, Florida Beach, Gulf Resort Beach, and Laguna Beach** are sections of the residential and resort areas. **St. Andrews State Park** is on both sides of the dredged cut of the main ship channel in St. Andrew Bay entrance.

(201) The route of the Intracoastal Waterway is through East Bay, St. Andrew Bay, and West Bay. East Bay, West Bay, and North Bay are discussed in chapter 12 in connection with the waterway.

(202) **Chart 11360.**—From St. Andrew Bay W for 85 miles to Pensacola Bay, the shoreline is a gently curving sand beach, unbroken except at the entrance to Choctawhatchee Bay, 44 miles W of St. Andrew Bay entrance. Except at the entrances to the bays, the beach is steep-to and can be approached closely. Depths of less than 30 feet are rarely over 0.3 mile offshore. For this reason, the sea rolls in with undiminished strength and breaks heavily on the shore when driven by S winds. Small craft bound W from St. Andrew Bay should use the Intracoastal Waterway.

(203) **Chart 11388.—Topsail Bluff**, a slightly elevated knoll, is about 10 miles E of the entrance to Choctawhatchee Bay and can be seen for several miles.

(204) The **danger zones** of aerial gunnery and bombing ranges are in Choctawhatchee Bay. (See **334.700**, chapter 2, for limits and regulations.) The **danger zone** of a guided missiles test operations area is in the Gulf S of Choctawhatchee Bay. (See **334.720**, chapter 2, for limits and regulations.)

(205) **Charts 11385, 11388.—Choctawhatchee Bay Entrance. East Pass**, about 44 miles WNW of St. Andrew Bay entrance, ex-

tends into the W part of Choctawhatchee Bay between Moreno Point and Santa Rosa Island, and is protected by two jetties. The jetties are marked by a light off their seaward ends.

Choctawhatchee Bay Entrance Lighted Whistle Buoy CB (30°22'18"N., 86°30'24"W.), about 0.5 mile off the entrance to the channel, marks the approach. To carry the best depths, mariners should be guided by the color of the water. Passage should not be attempted in rough weather. Local knowledge is advised. In August-December 2001, the controlling depth was 5.5 feet (6.1 feet at midchannel) from Buoy CB to the bridge; thence in May 2001, 9.9 feet through North Channel to the bay. The channel S of the bridge is subject to frequent changes and shoals rapidly between dredgings. Buoys are frequently shifted to mark best water. The channel is marked by lights, buoys, and daybeacons.

(206) An unlighted wreck of a shrimp boat with red superstructure lies sunk and awash in 30°20'30"N., 86°42'50"W., about 3 miles offshore and 10 miles W of the entrance.

(207) From close offshore the entrance is easily identified by U.S. Route 98 fixed highway bridges crossing the channel just inside the E end of Santa Rosa Island. The parallel bridges have a least clearance of 49 feet.

(208) **Choctawhatchee Bay**, about 25 miles long, extends nearly parallel with the coast and separated from it by a strip of land varying in width from 0.3 to 4 miles. Depths in the bay decrease gradually from W to E with 18 to 43 feet in the W two-thirds, except near the shores, and 8 to 16 feet in the E third. Traffic in Choctawhatchee Bay consists principally of travel along the Intracoastal Waterway and oil deliveries to Freeport. There are good highway connections to Pensacola and Panama City on both the N and S shores of the bay.

(209) U.S. Route 331 highway causeway over the bay at **Wheeler Point** has a fixed span at the Intracoastal Waterway channel with a clearance of 65 feet.

(210) **Choctawhatchee River** empties into the E end of Choctawhatchee Bay. **Cypress River, Indian River, and Mitchell River** are branch outlets N of the main river. The mouth of Choctawhatchee River is very shallow, and boats generally enter through Cypress River. A rectangular area of exposed piling, about 1.2 miles long and 0.5 mile wide just off the mouths of the several rivers in this system, is used as a radar target range by Eglin Air Force Base. Cypress River entrance, marked by a light, has a controlling depth of about 6 feet. The river extends 1.5 miles inland to a junction with Choctawhatchee River. **Black Creek**, with depths of 8 feet inside but bars of about 1-foot depth blocking the entrance, leads to the village of **Black Creek**. Berths, gasoline, a launching ramp, water, ice, and some marine supplies are available at a small fish camp on the W bank of the creek about 1.6 miles above its mouth. Outboard engine repairs are available nearby.

(211) **Freeport**, a small town on **Fourmile Creek**, which empties into **LaGrange Bayou**, is a distribution point for petroleum products, grain, and molasses which are brought in by barge.

(212) A dredged channel leads from Choctawhatchee Bay to a turning basin at the head of navigation just S of the fixed highway bridge at Freeport. In January 2000, the controlling depth was 5½ feet (6 feet at midchannel) in the channel with 8½ to 9½ feet in the turning basin, except for lesser depths along the N and NW edges. The channel is well marked. The bridge at Freeport has a fixed 18-foot span with a clearance of 5 feet. An overhead power

cable with a clearance of 24 feet crosses the channel close E of the bridge.

(213) Access channels have been dug through the spoil banks to a channel along the E bank as far as **Ramsey Branch**. Depths of about 1½ feet were reported in these channels in November 1997. A small marina on Ramsey Branch provides temporary bulkhead tie-up, limited marine supplies, and outboard engine repairs.

(214) There are numerous private piers and fish piers on LaGrange Bayou and Fourmile Creek. Gasoline and some marine supplies can be obtained at stores and service stations on U.S. Route 331 and State Route 20 in Freeport. A small shipyard at the head of LaGrange Bayou on Fourmile Creek has a marine railway that can handle craft to 120 feet for hull and engine repairs.

(215) **Basin Bayou** is a landlocked lake about 5 miles W of LaGrange Bayou. State Route 20 highway bridge across the narrow entrance has a 15-foot fixed span with a clearance of 4 feet. A paved launching ramp is near the bridge and gasoline is available in cans. The launching ramp is accessible at high water only.

(216) **Rocky Bayou**, about 10 miles W of Basin Bayou, has depths of 10 to 20 feet and affords good anchorage for small craft. The entrance to the bayou is marked on the W side by a light. A channel about 0.9 mile above the entrance to the bayou leads SE to a marina in **Ward Cove**. The channel is marked by a private buoy and had a reported controlling depth of about 6 feet in May 1982. Gasoline, diesel fuel, berths with water and electricity, ice, a launching ramp, and marine supplies are available.

(217) **Boggy Bayou**, about 1.5 miles W of Rocky Bayou, leads to two towns on the bayou. The entrance to the bayou is marked by lights and daybeacons. In March 1993, shoaling reportedly extended into the channel E of Light 9 in about 30°30'18"N., 86°29'04"W. **Niceville**, a small town at the head of the bayou, has a hospital, an oil terminal with wharf, a small marina, and a fish packing plant. There are many private piers. Berths are available at the marina.

(218) **Valparaiso** is a small town on the W bank of the bayou at the intersection of the bayou with **Toms Bayou**. There is a public park with a launching ramp on the point. A boatyard on the N bank just inside the entrance to Toms Bayou has a marine railway that can handle craft up to 83 feet for hull and engine repairs.

(219) A fixed highway bridge across Toms Bayou has a 33-foot channel span with a clearance of 11 feet. The overhead power and TV cables close W of the bridge have a clearance of 38 feet.

(220) A **restricted area** has been designated in **Weekley Bayou**, an arm of Boggy Bayou. (See **334.740**, chapter 2, for limits and regulations.)

(221) **Eglin Air Force Base** covers the NW shore of Choctawhatchee Bay from Boggy Bayou to Garnier Bayou. The tanks and buildings at the base are conspicuous.

(222) **Bens Lake**, about 1.7 miles NE of **Black Point**, is an Air Force **restricted area**. (See **334.750**, chapter 2, for limits and regulations.)

(223) **Joes Bayou**, 2 miles NE of the bay entrance, is entered through a channel marked by daybeacons which, in August 1987, was reported to have a controlling depth of 11 feet. The bayou affords good anchorage for small craft.

(224) **Garnier Bayou** and **Cinco Bayou** have a common entrance at the NW corner of Choctawhatchee Bay, and each has depths of 7 feet or more and excellent anchorage against bad weather. State Route 85 highway crossing Garnier Bayou, about 0.5 mile above the entrance, has a fixed span with a clearance of

19 feet. A large marina is in a protected basin on the E shore about 0.3 mile S of the bridge at **Shalimar**. A tall cylindrical water tank, which resembles a stack near the marina, is prominent. A 30-ton mobile hoist at the marina can haul out craft up to 35 feet for hull and engine repairs or dry open or covered storage. Berths, electricity, gasoline, diesel fuel, water, ice, and marine supplies are available. In May 1982, depths of 10 to 12 feet were reported in the basin.

(225) In March 1994, a 1-foot shoal was reported in upper Garnier Bayou near the center of the bayou in about 30°27'41.1"N., 86°35'41.6"W.

(226) A yacht club on **Smack Point**, on the S side of the entrance to Cinco Bayou, has berths and other services for members and guests.

(227) State Route 85 fixed highway bridge crossing Cinco Bayou, about 0.5 mile W of the entrance, has a clearance of 19 feet. An overhead power cable at the bridge has a clearance of 55 feet.

(228) **Fort Walton Beach**, at the W end of Choctawhatchee Bay, is on the Intracoastal Waterway, which is described in chapter 12.

(229) **Destin** is a small fishing village and resort on **Moreno Point**. There are several marinas in **Destin Harbor (Old Pass Lagoon)**, a lagoon behind the spit on the E side of the entrance to East Pass, Choctawhatchee Bay Entrance. There is reported to be excellent anchorage in the lagoon along the S shore. Gasoline, diesel fuel, water, ice, marine supplies, and limited berths are available. A mobile hoist can handle craft to 50 tons for hull, engine, and electronic repairs. Local fishing guides can be hired as pilots for the bay and the waters of the Gulf. Numerous charter boats moor along the N side of the lagoon, and a few moor on the bay side of Destin close N of the bridge. In November 2001, the controlling depth through the channel into Destin Harbor was 4.3 feet (6.7 feet at midchannel). It is reported that the channel shoals rapidly after dredging.

(230) A marina is on Santa Rosa Island about 3 miles W of the highway bridge over East Pass, Choctawhatchee Bay Entrance. There is a mobile hoist that can handle craft to 15 tons for hull and engine repairs or storage. Berths, electricity, and water are available. There is a fuel dock at the S end of the bridge over The Narrows to Fort Walton Beach. Gasoline and diesel fuel are available.

(231) **Destin Coast Guard Station** is on Santa Rosa Island, about 0.5 mile WSW of the highway bridge over East Pass.

(232) **Charts 11360, 11382, 11388, 11385, 11378.—Santa Rosa Sound** and its E continuation, **The Narrows**, parallel the coast between Choctawhatchee Bay and Pensacola Bay and are separated from the Gulf by **Santa Rosa Island**, a narrow strip of beach. Santa Rosa Sound and The Narrows have a combined length of 33 miles and a width varying from 1.8 miles in the widest part of the sound to 200 yards in the narrowest part. The W part of the sound has a depth of 15 feet or more; the central part and The Narrows have been dredged where necessary to provide a channel for the Intracoastal Waterway. The Narrows and Santa Rosa Sound are discussed further in chapter 12 in connection with the waterway.

(233) The **danger zones** of two Air Force proving grounds have been established in Santa Rosa Sound and the Gulf. (See **334.710 and 334.730**, chapter 2, for limits and regulations.)

(234) Unexploded ordnance lies on the bottom a mile offshore from Santa Rosa Island, about 8 miles W of Choctawhatchee Bay Entrance.

(235) Santa Rosa Island and the E part of Perdido Key, W of the entrance to Pensacola Bay, are part of **Gulf Islands National Seashore** and subject to the rules and regulations of the U.S. Department of the Interior's National Park Service.

(236) **Charts 11384, 11383, 11378, 11382.—Pensacola Bay** lies 110 miles WNW of Cape San Blas and 125 miles NE of South Pass, Mississippi River. The bay, about 12.5 miles in length, has depths of 20 to 50 feet, and affords excellent shelter and anchorage; it is frequently used as a harbor of refuge. The bay is the approach to several towns and the city of Pensacola; to Escambia and East Bays, extending N and E, respectively, from its E end; to Blackwater Bay and Blackwater River N of East Bay; and to Santa Rosa Sound.

(237) Vessels approaching Pensacola Bay by day can verify their positions by the appearance of the land. For 40 miles E of the entrance, Santa Rosa Island presents a white sand beach and low white sand hills with scattered clumps of trees and bushes; back of this on the mainland are thick woods. For 40 miles W of the entrance, the shore is low and thickly wooded nearly to the water, showing no breaks and very few hillocks. Soundings will indicate whether a vessel is E or W of the entrance, the 10-fathom curve approaches the coast much more closely E of the entrance. Depths of 10 fathoms less than 3 miles off the beach indicate the vessel is E of the entrance.

(238) At night or in thick weather it is well for a vessel uncertain of her position to stay in depths of at least 12 fathoms until the light is sighted or the position is otherwise determined.

(239) **Pensacola**, 7 miles above the entrance to Pensacola Bay, is a commercial city and the site of a U.S. Naval Air Station. The port has good facilities for coastwise and foreign shipping. Shipments through the port include bagged foodstuffs, seafood products, logs, lumber, steel products, scrap iron, marine supplies, grain, petroleum products, sand and gravel, flour, canned goods, paper products, produce, chemicals, fertilizer, rice, peanuts, and general cargo.

(240) **Prominent features.—Pensacola Light** (30°20'48"N., 87°18'30"W.), 191 feet above the water, and shown from a 171-foot conical brick tower, lower third white, upper two-thirds black, on the shore N of the entrance, is the principal mark for the entrance.

(241) **Fort Pickens**, on the E point of the entrance, is a part of Gulf Islands National Seashore. The buildings of the park ranger station 2.5 miles E of the entrance, two spherical elevated tanks 8.6 and 10.8 miles E, and a 220-foot water tank about 26.5 miles E of the entrance are prominent when coming from the E. The span of the Perdido Pass highway bridge 13 miles W of the entrance, and the buildings at Gulf Beach 6.5 miles W are conspicuous when coming from the W. The wreck of the old battleship MASSACHUSETTS on the S end of Caucus Shoal, W of the entrance, is visible but cannot be seen for any distance offshore; the wreck is marked by a lighted bell buoy. The buildings, tanks, towers, and other features of the naval air station on the neck S of Warrington can be seen over Santa Rosa Island from the S.

(242) In Pensacola, the Municipal Auditorium on the end of the Municipal Pier, the large water tank, a church steeple, the radio mast atop the telephone building, the Empire Building, the highest building in town which has a small square elevator house on

top, and a large green 11-story building about 3.3 miles W of the Municipal Pier can be identified from offshore. At night the numerous radio towers with occulting red lights on top and the aviation lights are easily seen.

(243) **Vessels should approach the harbor through the prescribed Safety Fairways.** (See 166.100 through 166.200, chapter 2.)

(244) In July 1984, an obstruction was reported in the coastwise safety fairway about 5 miles SE of Caucus Channel entrance in about 30°14'20"N., 87°12'00"W. Several other submerged obstructions are in the fairway about 3.5 miles S of the channel entrance.

(245) **COLREGS Demarcation Lines.**—The lines established for Pensacola Bay are described in **80.810**, chapter 2.

(246) **Channels.**—The entrance to Pensacola Bay, 0.6 mile wide, is through **Caucus Channel**, a cut dredged through shoals that extend 1.5 miles seaward from the entrance. A Federal project provides for a depth of 35 feet for 5 miles from the Gulf to a large turning basin off the naval air station. The U.S. Navy provides an additional depth to 44 feet for a width of 800 feet in Caucus Channel. (See Notice to Mariners and latest editions of charts for controlling depths.)

(247) **Bay Channel** extends NE for about 4 miles to two parallel channels, **West Channel** and **East Channel**, that lead N to **Inner Harbor Channel**, along the wharves at Pensacola. Project depth in these channels is 33 feet. (See Notice to Mariners and latest editions of charts for controlling depths.)

(248) **Bayou Chico Channel** is a dredged channel that leads from the bay to a turning basin about 1 mile above the entrance to the bayou. A Federal Project provides for 15 feet through the entrance channel, thence 14 feet in the inner channel and turning basin. (See Notice to Mariners and latest editions of charts for controlling depths.)

(249) The channels are marked by lighted ranges, lights, daybeacons, and lighted and unlighted buoys.

(250) **Anchorage.—Vessels should anchor in the Pensacola Anchorage, E of the Safety Fairways.** (See 166.100 through 166.200, chapter 2.) In addition, good anchorage can be found in any part of the bay except S of the naval air station. Inside Pensacola Bay, the usual anchorage is off the city of Pensacola where the holding ground is good.

(251) **Dangers.—East Bank and Middle Ground** form an extensive shoal area that extends 1.6 miles S from the W end of Santa Rosa Island. **Caucus Shoal**, with depths of 2 to 18 feet, extends 1.5 miles S from the W side of the entrance. Because of shoaling on the E side of the entrance, large vessels are advised to navigate as close as possible to the range line. In November 1987–April 1988, shoaling was reported to exist at the entrance to the bay between Buoy 7 and Lighted Bell Buoy 12.

(252) A **restricted area** and a seaplane **restricted area** are in Pensacola Bay. (See **334.778** and **334.780**, respectively, chapter 2, for limits and regulations.)

(253) **Tides and currents.**—The diurnal range of tide at the entrance is 1.1 feet, at Pensacola 1.3 feet, and at Milton on Blackwater River 1.6 feet. (Daily predictions for Pensacola are given in the Tide Tables.) N winds sometimes lower the water surface 1.5 feet, and hurricanes may raise the water surface from 2 to 9 feet. The diurnal velocity of the tidal current in Pensacola Bay Entrance in midchannel is about 1.7 knots at strength, although currents of up to 8 knots have been reported in the entrance and up to 5 knots at the Pensacola Naval Air Station pier.

(254) In Caucus Cut, for 2 hours at the strongest of the ebb, the normal current has a velocity of 2 to 2.5 knots, setting SE somewhat across the channel in the vicinity of Fort Pickens. The flood has less velocity and sets along the channels. The flood has greater velocity following a norther than at other times.

(255) **Weather.**—Pensacola is situated in latitude 30°25'N., longitude 87°13'W., on a somewhat hilly, sandy slope which borders Pensacola Bay, an expanse of deep water several miles in width, which in turn is separated from the Gulf of Mexico by a long, narrow island that forms a natural breakwater for the harbor. Elevations in the city range from a few feet above sea level to more than 100 feet in portions of the residential sections, and most of the city is well above storm tides.

(256) The hurricane season extends from late May into early November when there is about a 1 in 10 chance of hurricane force winds at Pensacola. An average of one tropical storm or hurricane passes within 180 miles of Pensacola each year. Since 1950, 15 tropical storms have come within 50 miles of Pensacola including hurricane Opal in September 1995. Opal made a direct hit at Pensacola and caused extensive storm surge-induced damage. Maximum winds in the region reached 110 knots. In a recent 56-year period, 22 of the 61 tropical cyclones that passed within this distance generated hurricane-force winds. September is the most likely month for a tropical cyclone. The principal threat is from storms moving in from the SE, S, and SW. The port of Pensacola is vulnerable to strong winds from the SE through SW while Escambia and Blackwater Bays are vulnerable to winds from N or S. Strong winds do pose a wind wave problem at all deepwater berths because of the large expanse of open water in greater Pensacola Bay, which encompasses East, Blackwater, Escambia and Pensacola Bays. It is protected from ocean waves by the sand barrier islands of Perdido Key and Santa Rosa Islands; these barriers are breached only during a severe storm surge. While storm tides of up to 10 feet above mean sea level have occurred in the past, it has been estimated that 100-year storm tides could reach 13.5 feet in Blackwater and Escambia Bays.

(257) The location of Pensacola in the hurricane belt and the absence of sheltered facilities and anchorages renders Pensacola Bay a poor hurricane haven. Large vessels are advised to leave the area well ahead of the storm's arrival. Small craft, if they cannot be taken out of the water, should seek shelter in the many bays, sloughs, creeks, and rivers that border the greater Pensacola Bay.

(258) Because of Pensacola's nearness to the Gulf of Mexico, it benefits from its moderating effect, which tempers the cold northers of winter and provides cool sea breezes during summer afternoons.

(259) While 90°F temperatures occur about 61 times each year, readings of 100°F or more are observed on about 18 days each summer. Winter temperatures fall below freezing on about 15 days also. These freezes are brought by cold fronts that are often accompanied by strong, gusty winds and rain or, on rare occasions, snow. The average annual temperature at Pensacola is 68.2°F with an average high of 76.9°F and an average low of 59°F. July is the warmest month averaging 82.4°F and January the coolest averaging 52.4°F. The warmest temperature on record at Pensacola is 106°F recorded in July 1980 and the coolest temperature on record is 5°F recorded in January 1985. Each month, May through August has had temperatures in excess of 100°F while each month, April through October has had temperatures

in excess of 90°F. Each month, November through March, has had temperatures below freezing. Precipitation is moderate averaging 63.64 inches year. July is the wettest month averaging 7.67 inches and November is the driest averaging 3.85 inches. A third of the annual rainfall occurs during the summer months of June, July, and August. The greatest 24-hour rainfall occurred in March 1979 when 11.1 inches fell. Snowfall is light averaging less than one inch annually. The greatest 24-hour snowfall on record is 2.3 inches recorded in March 1954. Wind gusts have reached 50 to 60 knots and, on occasion, gone higher in fronts or winter storms. Approaching the port, winds climb to 17 knots or more about 7 to 9 percent of the time from November through April; September is also a likely month for strong winds. Summer winds are usually light and strengthen in thunderstorms or tropical cyclones. While thunderstorms may occur in any month, they are most likely from May through September when they develop on about 5 to 15 days per month; July and August is the most active period. Fog is most likely during winter and spring when visibilities fall below 0.5 mile on 4 to 7 days per month. At other times visibilities are reduced briefly in heavy showers.

(260) The National Weather Service maintains an office in Pensacola. **Barometers** may be compared there. (See appendix for address.)

(261) (See page T-5 for **Pensacola climatological table.**)

(262) **Pilotage, Pensacola.**—Pilotage is compulsory for all foreign vessels and U.S. vessels under register in foreign trade if drawing over 6 feet. Pilotage is optional for coastwise vessels that have on board a pilot licensed by the Federal Government. Pilotage is available from Pensacola Bar and Harbor Pilots, Inc., Post Office Box 565, Pensacola, FL 32593, telephone 850-433-3632. Pilots board vessels seaward of Pensacola Bay Entrance Lighted Gong Buoy 1, day or night. The gray 40-foot pilot boat has the word PILOT in white letters on the hull. The pilot boat monitors VHF-FM channel 16 from 2 hours prior to the expected arrival of a vessel; works channel 12. Contact the pilots through the above telephone number, through Port of Pensacola at 850-435-1875 (24-hours); Port of Pensacola Operations at 850-435-1880 (normal business hours, Monday through Friday), or through Pensacola Marine Operator or Mobile Marine Operator, or through ships agents. Port of Pensacola Operations monitors channel 16, works channel 12. For boarding, pilots request that vessels reduce speed to slow and rig the pilot ladder 4 to 5 feet above the water on the lee side.

(263) **Towage.**—Tugs up to 1,800 hp for assisting vessels in docking and undocking are obtainable only on advance notice. The towing companies in the area specialize in towing through the Intracoastal Waterway.

(264) **Quarantine, customs, immigration, and agricultural quarantine.**—(See chapter 3, Vessel Arrival Inspections, and appendix for addresses.)

(265) **Quarantine** is enforced in accordance with the regulations of the U.S. Public Health Service. (See Public Health Service, chapter 1.) There are several hospitals in Pensacola.

(266) Pensacola is a **customs port of entry.**

(267) **Coast Guard.**—**Pensacola Coast Guard Station** is about 1 mile E of Pensacola Light.

(268) **Harbor regulations.**—The City of Pensacola, Department of Marine Operations, establishes regulations governing the piers under the control of the Port of Pensacola. The **Port Director** is the manager of the Port of Pensacola and has an office at Port of Pensacola Building No. 1.

(269) **Bridges.**—No bridges cross Pensacola Bay between the entrance and Pensacola. A highway causeway over the bay between the E part of the city and Town Point has a fixed span with a clearance of 50 feet.

(270) **Wharves.**—Pensacola has more than 25 wharves and piers. Only the deep-draft facilities are described. For a complete description of the port facilities refer to Port Series No. 19, published and sold by the U.S. Army Corps of Engineers. (See appendix for address.) The alongside depths are reported depths; for information on the latest depths contact the port authorities. All the deep-draft facilities are at the head of East Channel.

(271) **Port of Pensacola Terminal** (30°24.2'N., 87°12.6'W.):

(272) Port of Pensacola, Roll-on/Roll-off Facility Wharf (30°24'18"N., 87°12'43"W.): 37 feet of berthing space; 21 feet alongside; deck height, 6 feet; occasional receipt and shipment of roll-on/roll-off general cargo; mooring vessels; owned by the City of Pensacola and operated by the Port of Pensacola.

(273) Port of Pensacola, Berth 1 (30°24'11"N., 87°12'41"W.): 540 feet of berthing space; 35 feet alongside; deck height, 11 feet; cold storage facility; pipelines extend to storage tanks, a combined 700,000-barrel capacity; shipment of frozen food (chicken); receipt of crude oil; receipt and shipment of asphalt; occasional receipt of liquid sulphur; owned by the City of Pensacola and operated by Hady Enterprises; Coastal Fuels Marketing Inc.; and Freeport Sulphur Co.

(274) Port of Pensacola, Berth 2 (30°24'06"N., 87°12'40"W.): 400 feet of berthing space; 35 feet alongside; deck height, 11 feet; pipelines extend to storage tanks, a combined 700,000-barrel capacity; receipt and shipment of conventional general cargo in foreign and domestic trade, including lumber, steel, paper products, and scrap metal; receipt of crude oil; receipt and shipment of asphalt; owned by the City of Pensacola and operated by the Port of Pensacola and Coastal Fuels Marketing Inc.

(275) Port of Pensacola, Berths 3 and 5 (30°24'05"N., 87°12'35"W.): 850 feet of berthing space; 35 feet alongside; deck height, 11 feet; pipelines extend to storage tanks, a combined 700,000-barrel capacity; receipt and shipment of conventional general cargo in foreign and domestic trade; including bagged food, lumber, steel, paper products, and scrap metal; receipt of crude oil; receipt and shipment of asphalt; owned by the City of Pensacola operated by the Port of Pensacola and Coastal Fuels Marketing Inc.

(276) Port of Pensacola, Berth 6 (30°24'06"N., 87°12'26"W.): 580 feet of berthing space; 35 feet alongside; deck height, 11 feet; receipt and shipment of paper products, and conventional general cargo in foreign and domestic trade; owned by the City of Pensacola and operated by the Port of Pensacola.

(277) Facilities at the Naval Air Station (30°20.7'N., 87°15.9'W.), SW of Pensacola proper, include a long marginal wharf with a depth of 34 feet alongside, and slips with depths alongside of 25 feet and 8 to 15 feet, respectively. A daybeacon marks the end of submerged seawall, about 125 yards S of the S slip.

(278) **Supplies.**—Bunker fuel is available at Port of Pensacola, Berth No. 1. Water, gasoline, diesel fuel, and marine supplies are available.

(279) **Repairs.**—Facilities are available for making repairs to hulls and machinery. The largest marine railway, at a shipyard in Bayou Chico, can handle vessels or barges to 1,000 tons or 225 feet. Woodworking, machine, and steel fabrication shops are available for almost any type of repairs. A mobile 25-ton crane is

available. Above-the-waterline repairs are made anywhere in the port area.

(280) **Small-craft facilities.**—Limited transient berths, gasoline, diesel fuel, water, ice, and marine supplies are available in Bayou Chico. Hull and engine repairs can be made. Mobile hoists to 50 tons are available. (See Repairs for largest facility.) Additional facilities along the Intracoastal Waterway SE and SW of Pensacola are discussed in chapter 12.

(281) **Communications.**—Pensacola is a seaport terminal for freight service of the Burlington Northern and Seaboard System Railroad. Sailings are made to ports throughout the world.

(282) The Pensacola Regional Airport is in the NE part of the city.

(283) **Bayou Chico**, an inlet in the SW part of the city, extends about 1.1 miles W from the Pensacola Bay where it divides into a N arm and a SW arm. Bayou Chico Channel, a dredged channel in the bayou, is discussed earlier in this chapter under Channels. Waterborne commerce on the bayou includes petroleum products, shell, rafted logs, stone and crushed rock, gravel and sand, and trailers on barges. The Barrancas Avenue highway bridge, crossing the bayou 0.5 mile above the mouth, has a fixed span with a clearance of 65 feet. An overhead power cable with a clearance of 100 feet crosses the bayou just W of the bascule bridges. Burlington Northern railroad bridge, crossing the mouth of the N arm, has a 29-foot fixed span with a clearance of 7 feet. In March 2001, the railroad bridge was being removed. The twin 28-foot fixed spans of Navy Boulevard Bridge, crossing in the N arm 0.2 mile above the railroad bridge, have clearances of 7 feet. Pensacola Yacht Club and basin is on the N side of the entrance to the bayou, and an oil-handling berth is on the S side. There are several marinas, two boatyards, a shipyard, and shell, sand, and gravel plants on the bayou.

(284) **Bayou Texar** joins the bay just E of the highway causeway to Town Point. The entrance to the bayou is marked by a light and a daybeacon. A channel, marked by private piles, leads to a marina on the E side of the bayou about 0.6 mile above the entrance. In May 1982, the channel had a reported controlling depth of 2½ feet. Gasoline, water, and outboard engine repairs are available at the marina. Two fixed bridges cross the bayou. The Seaboard System Railroad (L&N) bridge at the mouth has a 20-foot fixed span with a clearance of 16 feet. The U.S. Route 90 highway bridge, about 0.5 mile upstream, has a 39-foot fixed span width with a clearance of 13 feet.

(285) **Warrington** is a suburb of Pensacola on **Bayou Grande**, which is 3 miles SW of the center of the city. The bayou entrance channel is marked by a private light and private daybeacons and is reported privately maintained to a depth of 6 feet. In April 1999, severe shoaling was reported in the channel entrance in about 30°22'30"N., 87°15'48"W.

(286) Admiral Murray fixed highway bridge, crossing Bayou Grande about 0.2 mile W of **Jones Point**, has a clearance of 14 feet.

(287) **Charts 11382, 11385, 11378.**—**Escambia Bay**, extends 9 miles N from Pensacola Bay. About 5 miles above its mouth the bay is crossed by a fixed railroad bridge with a clearance of 50 feet. The twin spans of Interstate Route 10 highway bridge cross the bay about 0.3 mile S of the railroad fixed bridged; clearances are 50 feet. The depths in the bay shoal gradually from 15 feet at the mouth to 7 feet in the upper reaches. A dredged channel, marked by lights and daybeacons, leads from 2 miles above the

entrance to the bay to about 6.1 miles above the mouth of Escambia River. In November 2001-June 2002, the controlling depth was 7.1 feet (10.0 feet at midchannel) to the mouth of Escambia River, thence 3.6 feet (5.2 feet at midchannel) to the head of the Federal project.

(288) N of **Devils Point** are shoals and submerged obstructions along the W shore of Escambia Bay. This shore should not be approached closer than 0.5 mile. Above the bridge draw, in line with Escambia River, are a 5-foot shoal and a pile awash at low water. These are outside the dredged channel.

(289) **Escambia River**, which flows into Escambia Bay from NW, extends N for 48 miles to the Alabama State line, where it is known as the **Concuh River**. The twin highway bridges about 1.5 miles above the mouth have fixed spans with clearances of 43 feet. In February 2002, a replacement fixed bridge with a design clearance of 42 feet was under construction immediately below the fixed bridge. There is a nylon fiber plant and some commerce in cypress logs and petroleum on this river, the latter barged to a powerplant about 2 miles above the bridge.

(290) Overhead power cables crossing the river 1.7 and 2.3 miles above the bridge have minimum clearance of 60 feet. There are fish camps along the highway bridge on the Escambia and White Rivers that have fuel, berths, launching ramps, and some marine supplies.

(291) **East Bay**, an E extension of Pensacola Bay, is entered by way of a passage 1 mile wide between the shoals off **Garcon Point** and **Redfish Point**. A highway bridge over the entrance to East Bay between Hernandez Point and Redfish Point has a fixed span with a clearance of 65 feet. Depths in the bay vary from 8 to 13 feet, with several small scattered shoals of 6 feet or less. The channel through the bay is marked.

(292) **Blackwater River** empties into **Blackwater Bay**, the N arm of East Bay. In 1999, the controlling depth was 7.0 feet (7.2 feet at midchannel) through the bay to Daybeacon 22; thence in June 2001, 4.5 feet (7.9 feet at midchannel) in the bay and the river to the town of Milton. The channel is marked by lights, daybeacons, and buoys.

(293) Numerous wrecks, submerged piling, and other obstructions constitute hazards in Blackwater River. **Wright Basin** and **Marquis Basin** are filled with such obstructions. Twin fixed highway bridges with clearances of 45 feet cross the river at Shields Point.

(294) **Milton** is a small town about 4 miles above the mouth of Blackwater River. There is some barge traffic in grains, soybeans, and petroleum products. Berthage is available at the town wharf above the bridges with depths of 10 to 15 feet reported alongside in May 1982. The Seaboard System Railroad (L&N) bridge crossing the river at Milton has a swing span with a clearance of 4 feet. (See **117.1 through 117.59 and 117.271**, chapter 2, for drawbridge regulations.) U.S. Route 90/State Route 10 fixed bridge with a clearance of 16 feet crosses about 0.2 mile above the railroad bridge. A marina in the small cove just above the highway bridge can provide berths, water, electricity, outboard engine repairs, and marine supplies. Launching ramps are nearby. A small marina for Navy personnel is about 1 mile above the bridge on the E side of the river. Gasoline is available in an emergency.

(295) **Chart 11360**.—The coast between Pensacola Bay and Mobile Bay has numerous high-rise buildings along the beach. No single structure stands out as a significant landmark. Depths

of 5 fathoms or less extend as much as 4 miles offshore between the two bays.

(296) **Charts 11382, 11378**.—**Big Lagoon**, which extends W from Pensacola Bay, is about 5 miles long and from 0.2 to 1 mile in width. The lagoon is separated from the Gulf by a narrow strip of sand beach, and is the route of the Intracoastal Waterway, which is discussed in chapter 12.

(297) **Perdido Bay**, an irregularly shaped body of water, is 13 miles W of Pensacola Bay entrance and 26 miles E of Mobile Bay entrance. Depths of 6 to 20 feet are found in the bay and in **Perdido River**, the latter being the river that serves as a boundary between the States of Florida and Alabama. **Arnica Bay** and **Bay La Launch** connect Perdido Bay with **Wolf Bay** on the W. Bayou St. John and Perdido Pass connect the bay with the Gulf to the S.

(298) The highway causeway over Perdido Bay at **Cummings Point** has a fixed span with a clearance of 39 feet.

(299) **Perdido Pass**, extending between **Florida Point** and **Alabama Point**, is easily distinguished from offshore by State Route 182 highway bridge across its entrance with two openings. The fixed span over Perdido Pass Channel has a clearance of 54 feet. The fixed span over Cotton Bayou Channel has a clearance of 41 feet. The dredged entrance channel leads from the Gulf through Perdido Pass to a fork at the highway bridge; thence into two channels, one leading N into **Terry Cove** and **Johnson Cove** and the other leading E into **Bayou St. John**. The entrance to the pass is protected by a jetty on the W and by a combination weir and jetty on the E; the top of the weir is submerged 6 inches at mean low tide. Numerous sunken wrecks are in the approach to the pass. In June 2002, the controlling depths were 3.8 feet in the entrance channel to the fork at the bridge, thence 9 feet in the west channel leading to Terry and Johnson Coves, thence in May 2000, 7.8 feet (8.2 feet at midchannel) in the east channel leading to Bayou St. John. The channels are well marked; a lighted whistle buoy off the entrance marks the approach.

(300) **COLREGS Demarcation Lines**.—The lines established for Perdido Pass are described in **80.810**, chapter 2.

(301) The Intracoastal Waterway in the lower part of Perdido Bay is reached from Perdido Pass via a marked channel through Bayou St. John. In May 1982, shoaling to 6 feet was reported in Bayou St. John between Daybeacons 6 and 8. An overhead power cable with a clearance of 59 feet crosses the channel leading to Terry Cove and Johnson Cove, about 0.4 mile from State Route 182 fixed bridge. Several small-craft facilities are in the coves. (See the small-craft facilities tabulation on chart 11378 for services and supplies available.)

(302) **Cotton Bayou**, on the W side of Perdido Pass 0.7 mile above the entrance, has a marina where berths, gasoline, water, marine supplies, a launching ramp, and open and covered storage are available. A forklift can handle craft to 26 feet for general repairs.

(303) **Old River** enters Perdido Pass from E between Florida Point and **Ono Island**. In May 1982, a reported depth of 5 feet could be carried through the river with local knowledge. The Florida-Alabama State boundary passes through Old River. A fixed highway bridge with a clearance of 24 feet crosses Old River about 1 mile E of Perdido Pass.

(304) **Chart 11376**.—**Little Lagoon** is a shallow body of water about 6 miles long and 0.5 mile wide lying just back of the beach



Perdido Pass

between Perdido and Mobile Bays. An opening, protected by jetties, 15 miles E of Mobile Point connects the lagoon with the Gulf. In August 1985, it was reported that the E jetty has partially collapsed and about 40 feet of the seaward end covers at low wa-

ter. In August 1985, the reported controlling depth through the opening was 1½ feet. A footbridge, a fixed highway bridge, and a pipeline with a least clearance of 7½ feet cross the opening.